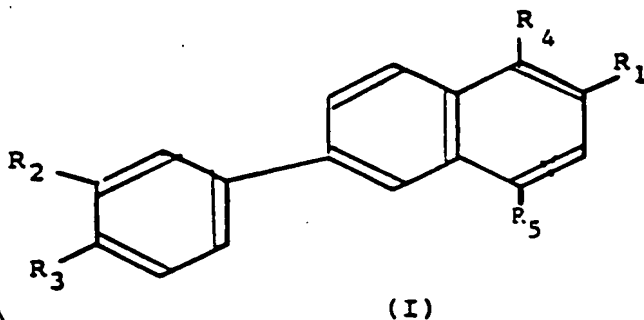


What is claimed is:

1. A benzonaphthalene compound of the formula



wherein

R_1 represents (i) $-\overset{\text{O}}{\parallel}{\text{C}}-\text{R}_6$ or (ii) $-\text{CH}_2\text{OH}$.

R_6 represents $-\text{N} \begin{matrix} \nearrow r' \\ \searrow r'' \end{matrix}$ or OR_7 wherein R_7 represents hydrogen,

alkyl having 1-20 carbon atoms, monohydroxyalkyl or polyhydroxyalkyl, r' and r'' represent hydrogen, lower alkyl, mono or polyhydroxyalkyl, aryl optionally substituted or a residue of an amino acid or a sugar, or together form a heterocycle,

R_2 represents hydrogen, branched or straight chain alkyl having 1-15 carbon atoms, alkoxy having 1-4 carbon atoms or a cycloaliphatic radical,

R_3 represents hydrogen, hydroxy, branched or straight chain alkyl having 1-4 carbon atoms, alkoxy having 1-10 carbon atoms, a cycloaliphatic radical optionally substituted, a thiocycloaliphatic radical, or $-\text{O}-\text{Si}(\text{CH}_3)_2-\text{R}_8$ wherein R_8 represents linear or branched lower alkyl, and

R_4 and R_5 each independently represent hydrogen, lower alkyl, hydroxy or lower acyloxy, or a salt thereof.

2. A compound of claim 1 wherein said alkyl is selected from the group consisting of methyl, ethyl, isopropyl, butyl and tert.butyl.

3. The compound of claim 1 wherein said alkoxy has 1-10 carbon atoms.

4. The compound of claim 3 wherein said alkoxy is selected from the group consisting of methoxy, ethoxy, isopropoxy, hexyloxy and decyloxy.

5. The compound of claim 1 wherein said lower acyloxy has 1-4 carbon atoms.

6. The compound of claim 5 wherein said lower acyloxy is selected from the group consisting of acetyloxy and propionyloxy.

7. The compound of claim 1 wherein said lower monohydroxy-alkyl has 2 or 3 carbon atoms.

8. The compound of claim 7 wherein said lower monohydroxy-alkyl is selected from the group consisting of 2-hydroxy ethyl and 2-hydroxy propyl.

9. The compound of claim 1 wherein said polyhydroxyalkyl has 3-6 carbon atoms and 2-5 hydroxy groups.

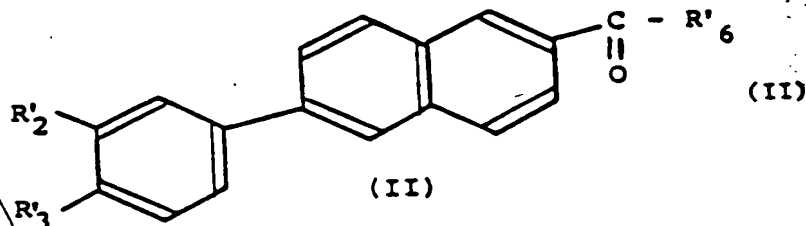
10. The compound of claim 9 wherein said polyhydroxyalkyl is selected from the group consisting of 2,3-dihydroxy propyl, 1,3-dihydroxy propyl or a residue of pentaerythritol.

11. The compound of claim 1 wherein said cycloaliphatic radical is selected from the group consisting of 1-methyl cyclohexyl and 1-adamantyl.

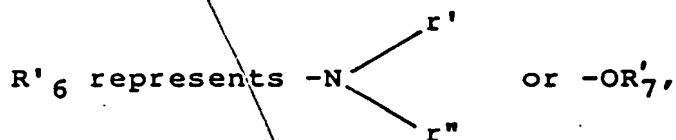
12. The compound of claim 1 wherein said thiocycloaliphatic radical is 1-adamantylthio.

13. The compound of claim 1 wherein r' and r'' taken together form a heterocycle selected from the group consisting of piperidino, piperazino, morpholino and pyrrolidino.

14. The compound of claim 1 having the formula



wherein



r' and r'' each independently represent hydrogen or lower alkyl, or r' and r'' taken together form a morpholino radical,

R'_7 represents hydrogen or lower alkyl,

R'_2 represents hydrogen, alkyl, alkoxy or 1-adamantyl, and

R'_3 represents hydrogen, hydroxy, alkyl, alkoxy or 1-adamantylthio.

15. The compound of claim 1 selected from the group consisting of

- (1) 6-(3-methylphenyl)-2-naphthoic acid,
- (2) the methyl ester of (1),
- (3) 6-(4-tert.butyl phenyl)-2-naphthoic acid,
- (4) the methyl ester of (3),
- (5) 6-(3-tert.butyl phenyl)-2-naphthoic acid,
- (6) the methyl ester of (5),
- (7) 6-(3,4-dimethoxy phenyl)-2-naphthoic acid,
- (8) the methyl ester of (7),
- (9) 6-[p-(1-adamantylthio)phenyl]-2-naphthoic acid,
- (10) the methyl ester of (9),

- (11) 6-[3-(1-adamantyl)-4-methoxyphenyl]-2-naphthoic acid,
- (12) the methyl ester of (11).
- (13) the methyl ester of 6-[3-(1-adamantyl)-4-tert.butyl-dimethylsilyloxyphenyl]-2-naphthoic acid,
- (14) the methyl ester of 6-[3-(1-adamantyl)-4-hydroxyphenyl]-2-naphthoic acid,
- (15) 6-[3-(1-adamantyl)-4-hydroxyphenyl]-2-naphthoic acid,
- (16) the methyl ester of 6-[3-(1-adamantyl)-4-decyloxyphenyl]-2-naphthoic acid,
- (17) 6-[3-(1-adamantyl)-4-decyloxyphenyl]-2-naphthoic acid,
- (18) the methyl ester of 6-[3-(1-adamantyl)-4-hexyloxyphenyl]-2-naphthoic acid,
- (19) 6-[3-(1-adamantyl)-4-hexyloxyphenyl]-2-naphthoic acid,
- (20) the methyl ester of 6-[3-(1-adamantyl)-4-methoxyphenyl]-4-acetoxy-1-methyl-2-naphthoic acid,
- (21) 6-[3-(1-adamantyl)-4-methoxyphenyl]-4-hydroxy-1-methyl-2-naphthoic acid,
- (22) the methyl ester of 6-[3-(1-adamantyl)-4-methoxyphenyl]-4-hydroxy-1-methyl-2-naphthoic acid,
- (23) the methyl ester of 6-[3-(1-adamantyl)-4-methoxyphenyl]-1-methyl-2-naphthoic acid, Q
- (24) 6-[3-(1-adamantyl)-4-methoxyphenyl]-1-methyl-2-naphthoic acid,
- (25) 6-[3-(1-adamantyl)-4-methoxyphenyl]-2-naphthalene methanol,
- (26) the ethylamide of 6-[3-(1-adamantyl)-4-methoxyphenyl]-2-naphthoic acid,
- (27) the morpholide of 6-[3-(1-adamantyl)-4-methoxyphenyl]-2-naphthoic acid,

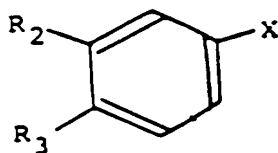
(28) the methyl ester of 6-[3-tert.butyl-4-methoxyphenyl]-2-naphthoic acid,

(29) 6-(3-tert.butyl-4-methoxyphenyl)-2-naphthoic acid,

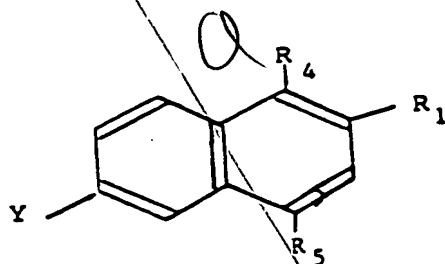
(30) the methyl ester of 6-[3-(1,1-dimethyldecyl)-4-methoxyphenyl]-2-naphthoic acid, and

(31) 6-[3-(1,1-dimethyldecyl)-4-methoxyphenyl]-2-naphthoic acid.

16. A process for preparing the compound of claim 1 comprising coupling, in an anhydrous solvent and in the presence of, as a reaction catalyst, a transition metal or a complex thereof, a magnesium, lithium or zinc derivative of a compound of the formula



with a halogenated naphthalene compound of the formula



wherein

R₁ to R₅ have the same meaning as set forth in claim 1, and X and Y represent Cl, Br, F or I.

17. The process of claim 16 carried out at a temperature ranging from -20 to +30°C.

18. A medicinal composition containing as the active principle thereof a compound of claim 1 or a salt thereof.

19. A pharmaceutical composition comprising a pharmaceutically acceptable vehicle suitable for enteral, parenteral, topical or ocular administration and an effective amount of as the active principle at least one compound of claim 1 or a salt thereof.

20. The pharmaceutical composition of claim 19 wherein said active principle is present in an amount ranging from 0.0005 to about 5 weight percent based on the total weight of said composition.

21. A process for the treatment of a dermatologic, rheumatismal, respiratory or ophthalmologic disease comprising administering to a person suffering from said disease an effective amount of the composition of claim 18.

22. A cosmetic composition for body and hair hygiene comprising a cosmetically acceptable vehicle and an effective amount as the active principle at least one compound of claim 1 or a salt thereof. *a*

23. The cosmetic composition of claim 22 wherein said active principle is present in an amount ranging from 0.0005 to 2 weight percent based on the total weight of said composition.

24. The cosmetic composition of claim 23 wherein said active principle is present in an amount ranging from 0.01 to 1 weight percent based on the total weight of said composition.